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| AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT | | | | 1. Contract ID Code Cost-Plus-Fixed-Fee | | Page 1 Of 7 | |
| 2. Amendment/Modification No. 06 | | 3. Effective Date 2003OCT21 | | 4. Requisition/Purchase Req No. SEE SCHEDULE | | 5. Project No. (If applicable) | |
| 6. Issued By TACOM WARREN BLDG 231 AMSTA-AQ-ATAA PATRICIA CLEMONS (586)574-8546 WARREN, MICHIGAN 48397-5000 HTTP://CONTRACTING.TACOM.ARMY.MIL EMAIL: CLEMONSP@TACOM.ARMY.MIL | | Code W56HZV | | 7. Administered By (If other than Item 6) DCMA DAYTON AREA C, BUILDING 30 1725 VAN PATTON AVENUE WRIGHT PATTERSON AFB, OH 45433-5302 | | Code S3605A | |
| | | | | SCD C PAS NONE ADP PT SC1012 | | | |
| 8. Name And Address Of Contractor (No., Street, City, County, State and Zip Code) INTERNATIONAL CONSULTANTS, INC. 4134 LINDEN AVENUE, STE. 300 DAYTON, OH. 45432-3035 TYPE BUSINESS: Small Disadvantaged Business Performing in U.S. | | | | <input type="checkbox"/> | | 9A. Amendment Of Solicitation No. | |
| | | | | <input type="checkbox"/> | | 9B. Dated (See Item 11) | |
| | | | | <input checked="" type="checkbox"/> | | 10A. Modification Of Contract/Order No. DAAE07-03-D-S011/0001 | |
| | | | | <input type="checkbox"/> | | 10B. Dated (See Item 13) 2003JAN23 | |
| Code 0J8L5 | | Facility Code | | | | | |
| 11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS | | | | | | | |
| <input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendments: (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified. | | | | | | | |
| 12. Accounting And Appropriation Data (If required) ACRN: AB NET INCREASE: \$68,742.73 | | | | | | | |
| 13. THIS ITEM ONLY APPLIES TO MODIFICATIONS OF CONTRACTS/ORDERS | | | | | | | |
| KIND MOD CODE: G It Modifies The Contract/Order No. As Described In Item 14. | | | | | | | |
| <input type="checkbox"/> | | A. This Change Order is Issued Pursuant To: The Contract/Order No. In Item 10A. | | | | The Changes Set Forth In Item 14 Are Made In | |
| <input type="checkbox"/> | | B. The Above Numbered Contract/Order Is Modified To Reflect The Administrative Changes (such as changes in paying office, appropriation data, etc.) Set Forth In Item 14, Pursuant To The Authority of FAR 43.103(b). | | | | | |
| <input checked="" type="checkbox"/> | | C. This Supplemental Agreement Is Entered Into Pursuant To Authority Of: Mutual Agreement of the Parties | | | | | |
| <input type="checkbox"/> | | D. Other (Specify type of modification and authority) | | | | | |
| E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return _____ copies to the Issuing Office. | | | | | | | |
| 14. Description Of Amendment/Modification (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) | | | | | | | |
| SEE SECOND PAGE FOR DESCRIPTION | | | | | | | |
| Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect. | | | | | | | |
| 15A. Name And Title Of Signer (Type or print) | | | | 16A. Name And Title Of Contracting Officer (Type or print) MARY L. MCCULLOUGH MCCULLOM@TACOM.ARMY.MIL (586)574-5268 | | | |
| 15B. Contractor/Offeror _____ (Signature of person authorized to sign) | | 15C. Date Signed | | 16B. United States Of America By _____ /SIGNED/ (Signature of Contracting Officer) | | 16C. Date Signed 2003OCT21 | |
| NSN 7540-01-152-8070 PREVIOUS EDITIONS UNUSABLE | | | | 30-105-02 | | STANDARD FORM 30 (REV. 10-83) Prescribed by GSA FAR (48 CFR) 53.243 | |

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| CONTINUATION SHEET | Reference No. of Document Being Continued | | Page 2 of 7 |
| | PIIN/SIIN DAAE07-03-D-S011/0001 | MOD/AMD 06 | |
| Name of Offeror or Contractor: INTERNATIONAL CONSULTANTS, INC. | | | |

SECTION A - SUPPLEMENTAL INFORMATION

1. The purpose of this modification 06 to task order 0001 is to fund the Expeditionary Unit Water Purifier (EUWP) effort as described in Section C of this modification. This task order 0001 supports the Program Manager Petroleum and Water Systems.
2. Therefore, Contract Line Item Number (CLIN) 1001AE is hereby established in the amount of \$\$49,867.53 (Est. cost: \$48,371.50, Fixed Fee: \$1,496.03, Total CPFF: \$49,867.53); the contract type is Cost Plus Fixed Fee, Completion Scope (based on 549 labor hours).
3. In addition, CLIN 1003AA is hereby established in the amount of \$18,875.20 for Other Direct Costs (ODCs) to fund Material; this is a Cost Only, No Fee CLIN.
4. The period of performance for this effort is from the date of award through 31 December 2003.
5. The total dollar dollar value of the task order is increased by \$68,742.73, from \$4,295,847.81 to \$4,364,590.54.
6. All other terms and conditions of the task order remain the same.

*** END OF NARRATIVE A 007 ***

Name of Offeror or Contractor: INTERNATIONAL CONSULTANTS, INC.

| ITEM NO | SUPPLIES/SERVICES | QUANTITY | UNIT | UNIT PRICE | AMOUNT |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|------------|--------------|
| 1001AE | <div>SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS</div> <div>SERVICES LINE ITEM</div> <div>NOUN: ICI EUWP 03-D-S011 PRON: E632V058EH PRON AMD: 01 ACRN: AB CUSTOMER ORDER NO: N0001403MP20101</div> <div>Labor, Completion Scope Cost Plus Fixed Fee (CLIN) (Based on 549 hours)</div> <div>Est. Cost: \$48,371.50 Fixed Fee: 1,496.03 Total CPFF:\$49,867.53</div> <div>(End of narrative B001)</div> <div>Inspection and Acceptance</div> <div>INSPECTION: Origin ACCEPTANCE: Origin</div> <div>Deliveries or Performance</div> <div>DLVR SCH PERFORM COMPL</div> <div>REL CD QUANTITY DATE</div> <div>001 0 31-DEC-2003</div> <div>\$ 49,867.53</div> | | | | \$ 49,867.53 |

Name of Offeror or Contractor: INTERNATIONAL CONSULTANTS, INC.

| ITEM NO | SUPPLIES/SERVICES | QUANTITY | UNIT | UNIT PRICE | AMOUNT |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|------------|--------------|
| 1003AB | <div>SERVICES LINE ITEM</div> <div>NOUN: ICI EUWP 03-D-S011 PRON: E632V058EH PRON AMD: 01 ACRN: AB CUSTOMER ORDER NO: N0001403MP20101</div> <div>Other Direct Costs (Material) Cost Only CLIN, No Fee</div> <div>(End of narrative B001)</div> <div>Inspection and Acceptance INSPECTION: Origin ACCEPTANCE: Origin</div> <div>Deliveries or Performance DLVR SCH PERFORM COMPL REL CD QUANTITY DATE 001 0 31-DEC-2003</div> <div>\$ 18,875.20</div> | | | | \$ 18,875.20 |

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| Name of Offeror or Contractor: INTERNATIONAL CONSULTANTS, INC. | | |

SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

STATEMENT OF WORK

LIGHTWEIGHT RO PRESSURE VESSELS FOR EUWP

- 1.0 BACKGROUND.
- 1.1 Need. The US Army has repeatedly run into difficulty meeting weight requirements when developing new water purification hardware. Weight savings measures are needed to reduce component weights of these systems. This can result in lighter systems or systems capable of higher capacities.

1.2 Scope. The scope of this effort is summarized by the following tasks:

- Design a reverse osmosis pressure vessel capable of up to a 70 percent weight savings over existing fiberglass vessels.

- Demonstrate the target weight savings by fabricating and testing a vessel.

- Provide a second pressure vessel for Government demonstration.
- 2.0 REFERENCES.
- PD- EUWP: Purchase description; 100,000-gpd Expeditionary Unit Water Purifier, dated 15 June 2003.

- ANSI/CSA NGV-2000: Basic Requirements for Compressed Natural Gas Vehicle (NGV) Fuel Containers.
- 3.0 REQUIREMENTS:
- 3.1 Design Evaluation: The contractor shall procure and inspect a standard fiberglass RO pressure vessel to determine critical dimensional interfaces, finishes, and laminate ply sequences. This inspection shall be performed using a combination of destructive and nondestructive examination of the vessel.

3.2 Material Selection and Evaluation: The contractor shall perform an engineering study of the candidate materials for use in the prototype unit to determine those materials most compatible with EUWP requirements. This will include capabilities to withstand storage and operating temperatures, as well as that all materials that come in contact with water must be approved for potable water use.

3.3 Vessel Design and Analysis: The contractor shall design the RO pressure vessel based on ANSI/CSA NGV-2000 where applicable. In addition, netting analysis software shall be used for laminate design and finite element analysis shall be used to analyze vessel ends.

3.4 Tool Design and Fabrication: Upon completion of vessel design and analysis, the contractor shall design and fabricate a mandrel for the fabrication of prototype vessels. The mandrel shall be designed such that it can be used to fabricate vessels capable of holding from two to four RO elements.

3.5 Prototype Fabrication: The contractor shall fabricate two fully operational carbon fiber/epoxy membrane vessels capable of housing four standard 8-inch RO elements with an operating pressure of 1200 psi. The first vessel will be used for testing, while the second will be provided to the Government for demonstration purposes.

3.6 Prototype Testing: The contractor shall test one vessel to an operating pressure of 1200 psi, a proof pressure of 1800 psi, and burst pressure greater than 3000 psi. Results of this test shall be conveyed to the Government via correspondence (such as email) and in the final report.
- 4.0 DELIVERABLES:
- 4.1 Design Report: The contractor shall document results of design evaluation, material selection and evaluation, and vessel design and analysis in the interim report. The Design Report shall be delivered to the Government 100 days after contract award.

4.2 Final Report: The contractor shall document the overall design process including test results from limit, proof and burst testing, drawing package for vessel and tool design and lessons learned from prototype fabrication.
- Design report and Final Report shall be prepared in accordance with DI-MISC-80508 (T), Contract Data Requirements List, A001.
- 5.0 SCHEDULE:
- Completion: 31 Dec 03

Name of Offeror or Contractor: INTERNATIONAL CONSULTANTS, INC.

SECTION G - CONTRACT ADMINISTRATION DATA

| LINE | PRON/ AMS CD/ ITEM MIPR | OBLG STAT/ ACRN JOB ORD NO | INCREASE/DECREASE | | CUMULATIVE | |
|------------|-------------------------------|-------------------------------|-------------------|--------------|------------|-----------|
| | | | PRIOR AMOUNT | AMOUNT | AMOUNT | AMOUNT |
| 1001AE | E632V058EH N0001403MP20101 | AB 1 | \$ 0.00 | \$ 49,867.53 | \$ | 49,867.53 |
| 1003AB | E632V058EH N0001403MP20101 | AB 1 | \$ 0.00 | \$ 18,875.20 | \$ | 18,875.20 |
| NET CHANGE | | | \$ | 68,742.73 | | |

| SERVICE | NET CHANGE | ACCOUNTING | | INCREASE/DECREASE |
|------------|------------|--------------------------------------------------|---------|-------------------|
| NAME | BY ACRN | ACCOUNTING CLASSIFICATION | STATION | AMOUNT |
| Navy | AB | 17 341319W3TP000RA35300683422D00000009290000EWP0 | | \$ 68,742.73 |
| NET CHANGE | | | \$ | 68,742.73 |

| PRIOR AMOUNT | | INCREASE/DECREASE | | CUMULATIVE |
|-----------------------|-----------------|-------------------|-----------|-----------------|
| OF AWARD | | AMOUNT | | OBLIG AMT |
| NET CHANGE FOR AWARD: | \$ 4,295,847.81 | \$ | 68,742.73 | \$ 4,364,590.54 |

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SECTION J - LIST OF ATTACHMENTS

| <u>List of</u> <u>Addenda</u> | <u>Title</u> | <u>Date</u> | <u>Number</u> <u>of Pages</u> | <u>Transmitted By</u> |
|----------------------------------|--------------|-------------|----------------------------------|-----------------------|
| Attachment 002 | CDRL A001 | 17-OCT-2003 | 001 | EMAIL |